

CLAIMS

What is claimed is:

1. A recording and/or reproducing apparatus for a recording medium including a data area for storing user data and a primary spare area for defect management of the user data, allocated upon initialization of the recording medium, comprising:

a controller to allocate and/or expand a supplementary spare area, after the initialization of the recording medium, in a forward direction starting from a rear portion of the data area of the recording medium, for defect management of the user data; and

a pickup to record or reproduce information onto or from the disc.

2. A defect management method for disc recording and/or reproducing of a recording medium, the recording medium including a data area for storing user data and a primary spare area for defect management of the user data, allocated upon initialization of the recording medium, comprising:

determining, after the initialization of the recording medium and prior to an allocation or expansion of a supplementary spare area of the recording medium, whether a sufficiently continuous empty area exists at the end of the data area for an allocation or expansion of the supplementary spare area, for defect management of the user data;

rearranging a plurality of non-continuous areas of the recording medium to generate a new continuous empty area at the end of the data area if a sufficiently continuous empty area at the end of the user data area does not exist; and

allocating the supplementary spare area in the new continuous empty area if the new continuous empty area has a sufficient amount of space for the supplementary spare area.

3. The method of claim 2, further comprising:

informing a user that the supplementary spare area cannot be allocated if the new continuous empty area does not have the sufficient amount of space for the supplementary spare area.

4. A recording and/or reproducing apparatus comprising a pickup to record or reproduce information onto or from a recording medium according to defect management control from a controller performing the method of claim 2.

5. A recording and/or reproducing apparatus comprising a pickup to record or reproduce information onto or from a recording medium according to defect management control from a controller performing the method of claim 3.